

# ENS202

802.11a/b/g/n Long Range Wireless Outdoor CB/AP



## Key Features

- IEEE 802.11 b/g/n compliant
- Up to 300Mbps (2.4GHz)
- 24V Proprietary PoE support
- AP/CB/CR/WDS/Repeater Modes
- Multi-SSIDs with VLAN tagged
- VLAN tag pass-through via the WDS BR mode
- Web Configuration and EZ controller software
- SNMP V1/ V2c/V3, MIB I/II supported
- WEP/WPA/WPA2 wireless encryption
- IPv4/IPv6 support
- Effective and flexible bandwidth management

## EnGenius Outdoor Access Points, High Sensitivity and Strong Reliability Solutions under Harsh Environment

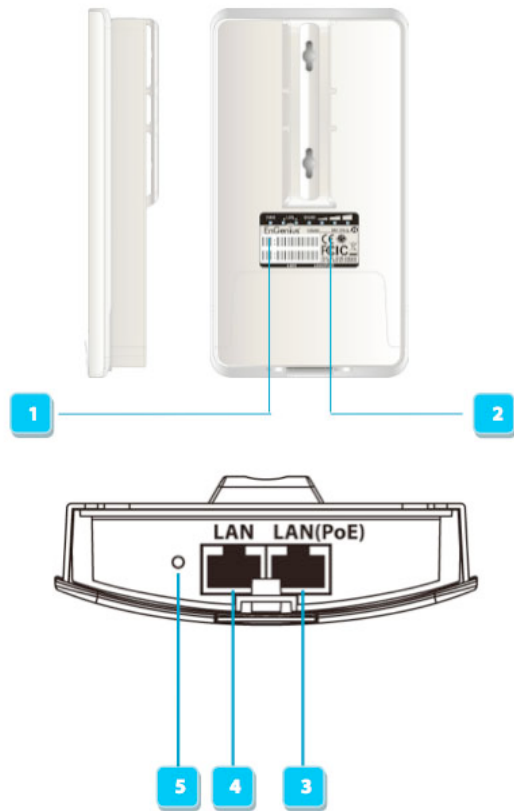
ENS202 engineered with the powerful independent RF interface that offers bandwidth up to 300Mbps on 2.4GHz band for accommodating heavy traffic services. The high-efficient 8dBi directional with polarization antenna provides an optimal, extended real outdoor throughput performance via point to point transmission in long range distances.

## Multiple Operation Modes

Besides the current operating modes on the **Access Point, Client Bridge, Client Router** and **WDS Modes**, EnGenius configured the repeater mode and the AP function under the CR mode for achieving the coverage, reducing the maintenance fee and flexible application for the customers' need.

## Effective Management

ENS202 integrated with Network Management Software "EZ controller" can offer variety uses in constructing scalable wireless network of all possible application and also allow centralized management via user-interface. ENS202 provides wide-range of authentication and encryption standards (including WEP, WPA, WPA2, TKIP/AES and IEEE 802.1X) to enforce the maximum security. Along with Proprietary PoE support excellent long-range network installation when used in conjunction with its outdoor family – ENH220EXT, ENH710EXT and ENH900EXT.



### indicator

1	Power Indicator
2	Signal Indicator

### Physical Interface

3	Fast Ethernet Port with PoE Input (Main Port)
4	Fast Ethernet Port
5	Reset Button

## SPECIFICATIONS

### Wireless Radio Specification

2.4GHz 802.11b/g/n	Max 300Mbps
Transmit Power (Maximum Value)	2.4GHz: Max 15dBm
	Maximum power is limited by regulatory power
Supported Radio Technology	802.11b: Direct-sequence spread-spectrum (DSSS)
	802.11n: Orthogonal frequency-division multiplexing (OFDM)
	802.11n with 20/40 MHz channel width
Supported Modulation Types	802.11b/g with 20 MHz channel width
	802.11b: BPSK, QPSK, CCK
	802.11n: BPSK, QPSK, 16-QAM, 64-QAM
Supported Data Rates (Mbps)	802.11b: 1, 2, 5.5, 11
	802.11g: 6, 9, 12, 18, 36, 48, 54
	802.11n: 6.5 to 300 (MCS0 to MCS15)

### Power

Power Source	24V proprietary compliant source
	Active Ethernet (Power over Ethernet, PoE)
Power Consumption	Maximum 7.2W

Antennas	
Internal high gain antennas	8dBi 2.4GHz antenna
Directional Type	Point to point transmission in the long range distance
Interface	
Two 10/100 BASE-T Ethernet Ports	One port supports 24V proprietary PoE input
	One port supports the extension of internet signal
	One reset button
Mechanical & Environment	
Dimensions/Weight	186mm (L) x 100mm (W) x 29mm (H)
	300g (unit without mounting kit and antennas)
Operating	Temperature: -20°C~70°C
	Humidity: 0%~90% typical
Storage	Temperature -30°C~80°C
Harsh Environment Use	IP55 rated
Operation Mode	
Access Point / Client Bridge / Client Router/Router/WDS	A variety of operation modes to serve multiple constituencies and applications.
	Enable the AP function under the CR mode for flexible application
Easy to Management	
Auto Channel Selection	Setting varies by regulatory domain
SSIDs	BSSID support
	4 SSIDs support
VLAN Tag	Independent VLAN setting can be enable or disable
	Any packet that enters the Device without a VLAN tag will have a VLAN tag inserted with a PVID (Ethernet Port VID)
VLAN Pass-through	VLAN pass through over WDS bridge
SNMP &MIB	v1/v2c/v3 support
	MIB I/II, Private MIB
Clients Traffic Status	Reports the various main information timely which is required by administrator QoS
	Complaint on IEEE802.11e standards
RADIUS Accounting	Assist operators to offload 3G to the Wi-Fi seamlessly

### Effective Control and Use

CLI Comments Support      Setting varies by Regulatory Domains

Distance Control (Ack Timeout)

Multicast Supported

Wi-Fi Scheduler      Set the schedule for rebooting the device

### Reinforcement Security

WEP Encryption-64/128/152 bit

WPA/WPA2 Enterprise (WPA-EAP using TKIP or AES)

Hide SSID in beacons

MAC address filtering      Filter up to 50 MACs

Wireless STA (Client) connection list      Reports the various main information timely which is required by administrator

### RF Specification (Aggregated Value)

Channel	Data Rate	Transmit Power (Aggregated, dBm)	Received Sensitivity (Aggregated, dBm)
802.11b 2.4 GHz	1 Mbps	15.0	-95.0
	2 Mbps	14.0	-95.0
	5.5 Mbps	14.0	-93.0
	11 Mbps	14.0	-93.0
802.11g 2.4 GHz	6 Mbps	14.0	-95.0
	54 Mbps	13.0	-75.0
802.11n HT20 2.4 GHz	MCS 0 / 8 / 16	15.0	-95.0
	MCS 7 / 15 / 23	13.0	-73.0
802.11n HT40 2.4 GHz	MCS 0 / 8 / 16	15.0	-95.0
	MCS 7 / 15 / 23	13.0	-73.0

\*Maximum performance of the hardware provided. Maximum transmit power is limited by local regulatory.

\*The supported frequency band is restricted by local regulatory requirements.

\*Transmit power is configured in 1.0dBm increments.

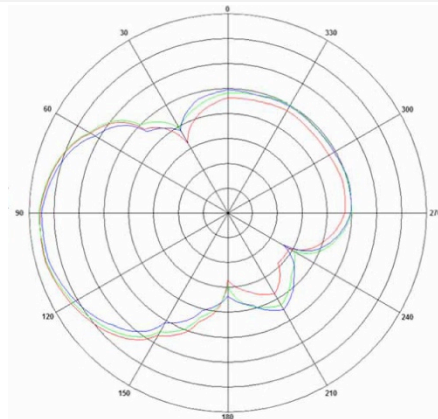
### Antenna Specifications (External Antenna)

External Antenna	2.4GHz (Port1)	2.4GHz (Port2)
Average Antenna Gain	8dBi	8dBi
Polarization	Linear	Linear

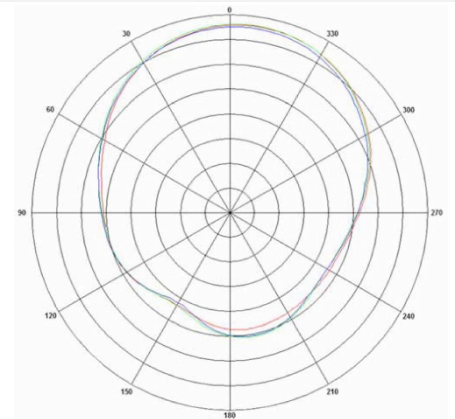
Azimuth Beam-Width	78°	54°
Elevation Beam-Width	45°	59°
VSWR	1:2.0	1:2.0

Dimension 76(L)x72(W)x3.8(H) mm

Diagram Pattern	E-Plane	H-Plane
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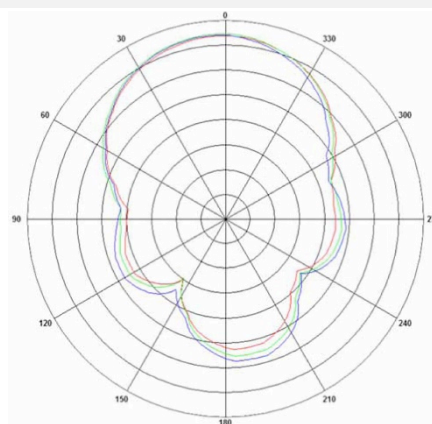


— 2400MHz  
— 2450MHz  
— 2500MHz

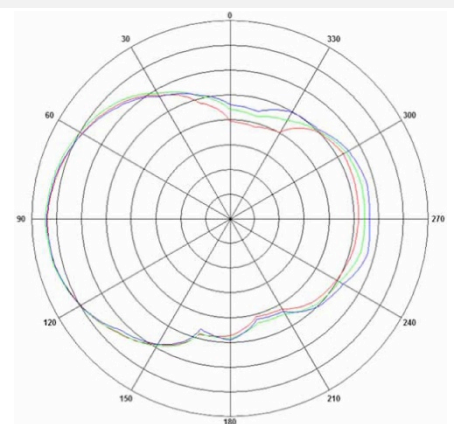


— 2400MHz  
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E-Plane	H-Plane
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— 2400MHz  
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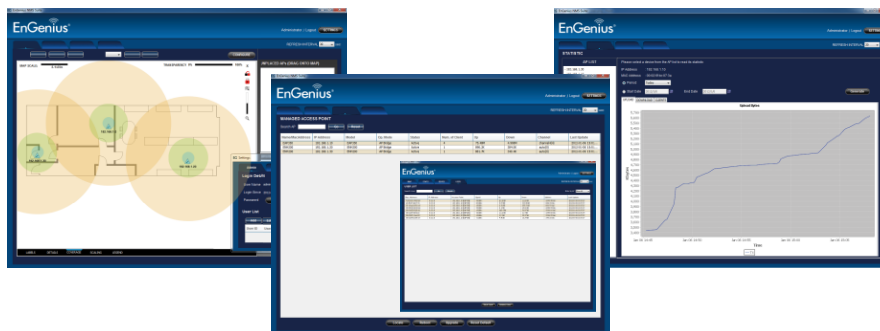
— 2400MHz  
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### EZ CONTROLLER

#### Network Management System - EnGenius Zone Controller

In enhancing the real-time functionality of a network, applying the best network management software tool is necessary. Built-in Network Management System, EZ Controller (EnGenius Zone Controller), provides an intelligent tool for IT manager, installer, and network administrators to configure control, and manage all wireless devices within network from one central location. This application ensures the entire network will optimally operate without troubles, glitches and interruptions.

The growing demand of performance related results from service providers or someone involved in an enterprise, you need to provide a huge platform to make it successful. The robust design of EZ Controller can manage different devices simultaneously and precisely, as well as configure the advanced service for wireless clients.



Configure, control and manage EnGenius Enterprise Wireless Devices from one central location.

#### Features:

- Easy-to-use User Interface
- Optimize network performance
- Eliminate downtime
- Check real-time wireless coverage
- Monitor and control each sheet
- Monitor traffic loads by AP, MAC or IP address
- Sequential firmware upgrades to deployed APs / Bridges
- Import and archive floorplan maps for radio coverage plotting
- Labels assets by MAC and IP address or user-defined aliases
- Export real-time AP statistics report

#### An intelligent solution for different business environment



Villa



Campus



Office



Plaza

ENS202 Data sheet Version 231014

Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range can vary depending on many factors including environmental conditions, distance between devices, radio interference in the operating environment, and mix of devices in the network. Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. Copyright © 2014 EnGenius. All rights reserved.

Learn more about EnGenius Solution at [www.engeniustech.com.sg](http://www.engeniustech.com.sg)